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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,270	12/28/2001	Masayuki Ueda	217833US2	4113

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ALEXANDRIA, VA 22314

EXAMINER

WU, RUTAO

ART UNIT	PAPER NUMBER
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3628

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/08/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/08/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/029,270	Applicant(s) UEDA ET AL.	
	Examiner Rob Wu	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-13,17,18,20,21 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,9-13,17,18,20, 21 and 33 is/are allowed.
- 6) ☒ Claim(s) 26-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 18 2006 has been entered.

Response to Arguments

2. Applicant's arguments, see page 18, filed December 18 2006, with respect to 35 U.S.C. §112 rejection of claim 12 have been fully considered and are persuasive. The U.S.C. §112 2nd rejection of claim 12 has been withdrawn.
3. Applicant's arguments with respect to claims 26-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat No. 5,249,120 to Foley in view of U.S. Pat No. 5,815,400 in view Hirai et al.

Referring to claim 26:

A component cost estimation system for estimating a cost of a component, said system comprising:

Foley discloses the following:

A memory which stores cost information for associating a material of a component, a cost of the material, manufacturing steps of the component, and costs involved in the manufacturing steps with one another; and (col 7: lines 33-36)

A computer, wherein:

The manufacturing steps include a pressing process; (col 18 lines 24-26)

The cost information includes information associating the manufacturing steps and costs of child components which are the components to be used in the manufacturing steps with each other; (col 6: lines 56-63; col 17: lines 29-35)

The cost information further includes information associating a pressing device to be used in the pressing process and a cost involved in using the pressing device with each other; (Fig 15; col 17: lines 56-63) and

Said computer:

Receives data for designating a material of a component to be manufactured, and manufacturing steps to be applied to the material; (col 6: lines 26-30)

Receives data for designating the pressing process, a material to which the pressing process is applied, and the pressing device to be used in the pressing process; (col 7: lines 38-68)

Retrieves a cost associated with the designated material, costs associated with the designated pressing device and costs associated with the designated manufacturing steps from the cost information; (col 6: lines 26-30, 64-66)

Foley does not express disclose obtains costs of molds to be used in steps included in the pressing process and costs of surface treatments to be applied to a surface of the component, and uses the obtained costs as costs retrieved from the cost information;

However, Foley does disclose tooling as an input for cost estimation, (col 6: lines 26-30) and Hirai et al disclose using electronic calculators to determine surface treatment information and cost information. (Abstract) Therefore, it would have been obvious for Foley to include the cost of molds in the pressing process and costs of surface treatments as disclosed by Hirai for cost estimation, since it would be wise for Foley to take into account all of the factors that could affect cost to achieve an accurate cost estimation.

Determines a result of estimation based on a sum of the retrieved costs; (col 8: lines 13-15) and

Generates data representing a result of estimation of a cost of the designated component based on each of the retrieved costs. (col 6: lines 61-63)

Referring to claim 27:

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A component cost estimation system which receives accesses from a plurality of working bodies via a network, and estimates a cost of a component, said system comprising:

Foley discloses the following:

A memory which stores cost information for associating a material of a component to be manufactured, cost of the material, manufacturing steps to be applied to the material, and costs involved in the manufacturing steps with one another; (col 6: lines 26-30, 65-66)

A reception server which receives designation data for designating a the material of the component and the manufacturing steps to be applied to the material from the working bodies who request and estimation via said network; and (col 6: lines 15-18, 26-30)

An estimation computer, (col 6: lines 30-35)

Wherein:

The manufacturing steps include a pressing process; (col 18 lines 24-26)

The cost information includes information associating the manufacturing steps and costs of child components which are the components to be used in the manufacturing steps with each other; (col 6: lines 56-63; col 17: lines 29-35)

The cost information further includes information associating a pressing device to be used in the pressing process and a cost involved in using the pressing device with each other; (Fig 15; col 17: lines 56-63) and

said estimation computer:

Receives data for designating the pressing process, a material to which the pressing process is applied, and the pressing device to be used in the pressing process; (col 7: lines 38-68)

Retrieves a cost associated with the material, the designated pressing device and manufacturing steps designated by the designation data received by said reception server from the cost information; (col 6: lines 26-30, 64-66)

Foley does not express disclose obtains costs of molds to be used in steps included in the pressing process and costs of surface treatments to be applied to a surface of the component, and uses the obtained costs as costs retrieved from the cost information;

However, Foley does disclose tooling as an input for cost estimation, (col 6: lines 26-30) and Hirai et al disclose using electronic calculators to determine surface treatment information and cost information. (Abstract) Therefore, it would have been obvious for Foley to include the cost of molds in the pressing process and costs of surface treatments as disclosed by Hirai for cost estimation, since it would be wise for Foley to take into account all of the factors that could affect cost to achieve an accurate cost estimation.

Determines a result of estimation based on a sum of the retrieved costs; (col 8: lines 13-15)

Generates estimation result data representing a result of the estimation of a cost of the component based on the retrieved costs; and (col 6: lines 15-18, 30-35, 56-63)

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Sends the estimation result data to the working bodies who have requested the estimation via said network. (Fig 1, col 17: lines 29-35)

Referring to claim 28:

A component cost estimation method for estimating a cost of a component, comprising:

Storing cost information for associating a material of a component, a cost of the material, manufacturing steps of the component including a pressing process, and costs involved in the manufacturing steps; (Tables 5-9) wherein the cost information includes information associating the manufacturing steps and costs of child components which are the components to be used in the manufacturing steps with each other, (col 6: lines 56-63; col 17: lines 29-35) and further includes information associating a pressing device to be used in the pressing process and a cost involved in using the pressing device with each other; (Fig 15; col 17: lines 56-62)

Receives data for designating a material of a component to be manufactured, and manufacturing steps to be applied to the material; (col 6: lines 26-30)

Receives data for designating the pressing process, a material to which the pressing process is applied, and the pressing device to be used in the pressing process; (col 7: lines 38-68)

Retrieves a cost associated with the designated material, costs associated with the designated pressing device and costs associated with the designated manufacturing steps from the cost information; (col 6: lines 26-30, 64-66)

Foley does not express disclose obtains costs of molds to be used in steps included in the pressing process and costs of surface treatments to be applied to a surface of the component, and uses the obtained costs as costs retrieved from the cost information;

However, Foley does disclose tooling as an input for cost estimation, (col 6: lines 26-30) and Hirai et al disclose using electronic calculators to determine surface treatment information and cost information. (Abstract) Therefore, it would have been obvious for Foley to include the cost of molds in the pressing process and costs of surface treatments as disclosed by Hirai for cost estimation, since it would be wise for Foley to take into account all of the factors that could affect cost to achieve an accurate cost estimation.

Determines a result of estimation based on a sum of the retrieved costs; (col 8: lines 13-15) and

Generates data representing a result of estimation of a cost of the designated component based on each of the retrieved costs. (col 6: lines 61-63)

Referring to claim 29:

A component cost estimation method for receiving accesses from a plurality of working bodies via a network, and estimating a cost of a component, said method comprising:

Storing cost information for associating a material of a component to be manufactured, a cost of the material, manufacturing steps including a pressing process to be applied to the material, and costs involved in the manufacturing steps with one

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another; (Tables 5-9) wherein the cost information includes information associating the manufacturing steps and costs of child components which are the components to be used in the manufacturing steps with each other, (col 6: lines 56-63; col 17: lines 29-35) and further includes information associating a pressing device to be used in the pressing process and a cost involved in using the pressing device with each other; (Fig 15; col 17: lines 56-62)

Receiving designation data for designating the material of a component and the manufacturing steps to be applied to the material from the working bodies who request estimation via said network; (col 6: lines 15-18, 26-30)

Receiving data for designating the pressing process, a material to which the pressing process is applied, and the pressing device to be used in the pressing process; (col 7: lines 38-68)

Retrieving costs associated with the material, the designated pressing device and manufacturing steps designated by the received designation data from the cost information; (col 6: lines 26-30, 64-66)

Foley does not express disclose obtains costs of molds to be used in steps included in the pressing process and costs of surface treatments to be applied to a surface of the component, and uses the obtained costs as costs retrieved from the cost information;

However, Foley does disclose tooling as an input for cost estimation, (col 6: lines 26-30) and Hirai et al disclose using electronic calculators to determine surface treatment information and cost information. (Abstract) Therefore, it would have been

obvious for Foley to include the cost of molds in the pressing process and costs of surface treatments as disclosed by Hirai for cost estimation, since it would be wise for Foley to take into account all of the factors that could affect cost to achieve an accurate cost estimation.

Determines a result of estimation based on a sum of the retrieved costs; (col 8: lines 13-15)

Generates estimation result data representing a result of the estimation of a cost of the component based on the retrieved costs; and (col 6: lines 15-18, 30-35, 56-63)

Sends the estimation result data to the working bodies who have requested the estimation via said network. (Fig 1, col 17: lines 29-35)

Referring to claim 30:

A computer-readable recording medium which stores a program for controlling a computer, which is connected to a memory for storing cost information associating a material of a component including a pressing process, a cost of the material, manufacturing steps of the component, and costs involved in the manufacturing steps with one another, wherein, the cost information includes information associating the manufacturing steps and costs of child components which are the components to be used in the manufacturing steps with each other, and further includes information associating a pressing device to be used in the pressing process and a cost involved in using the pressing device with each other, the program to perform:

Receiving designation data for designating a material of a component to be manufactured, and the manufacturing steps to be applied to the designated material; (col 6: lines 15-18, 26-30)

Receiving data for designating the pressing process, a material to which the pressing process is applied, and the pressing device to be used in the pressing process; (col 7: lines 38-68)

Retrieving a cost associated with the material, costs associating with the the designated pressing device and costs associated with the designated manufacturing steps from the cost information; (col 6: lines 26-30, 64-66)

Foley does not express disclose obtains costs of molds to be used in steps included in the pressing process and costs of surface treatments to be applied to a surface of the component, and uses the obtained costs as costs retrieved from the cost information;

However, Foley does disclose tooling as an input for cost estimation, (col 6: lines 26-30) and Hirai et al disclose using electronic calculators to determine surface treatment information and cost information. (Abstract) Therefore, it would have been obvious for Foley to include the cost of molds in the pressing process and costs of surface treatments as disclosed by Hirai for cost estimation, since it would be wise for Foley to take into account all of the factors that could affect cost to achieve an accurate cost estimation.

Determining a result of estimation based on a sum of the retrieved costs; (col 8: lines 13-15)

Generating estimation result data representing a result of the estimation of a cost of the component based on the retrieved costs; and (col 6: lines 15-18, 30-35, 56-63)

Referring to claim 31:

A computer-readable recording medium which stores a program for controlling a computer, which is connected to a reception server for receiving designation data for designating a material of a component to be manufactured and manufacturing steps including a pressing process to be applied to the material from a plurality of working bodies who request an estimation via a network, and is also connected to a memory for storing cost information for associating a material of a component, a cost of the material, manufacturing steps of the component, and costs involved in the manufacturing steps with one another, wherein the cost information includes information associating the manufacturing steps and costs of child components which are the components to be used in the manufacturing steps with each other, and further includes information associating a pressing device to be used in the pressing process and a cost involved in using the pressing device with each other, the program to perform:

Receiving designation data for designating the material of a component and the manufacturing steps to be applied to the material from the working bodies who request estimation via said network; (col 6: lines 15-18, 26-30)

Receiving data for designating the pressing process, a material to which the pressing process is applied, and the pressing device to be used in the pressing process; (col 7: lines 38-68)

Retrieving costs associated with the material, the designated pressing device and manufacturing steps designated by the received designation data from the cost information; (col 6: lines 26-30, 64-66)

Foley does not express disclose obtains costs of molds to be used in steps included in the pressing process and costs of surface treatments to be applied to a surface of the component, and uses the obtained costs as costs retrieved from the cost information;

However, Foley does disclose tooling as an input for cost estimation, (col 6: lines 26-30) and Hirai et al disclose using electronic calculators to determine surface treatment information and cost information. (Abstract) Therefore, it would have been obvious for Foley to include the cost of molds in the pressing process and costs of surface treatments as disclosed by Hirai for cost estimation, since it would be wise for Foley to take into account all of the factors that could affect cost to achieve an accurate cost estimation.

Determines a result of estimation based on a sum of the retrieved costs; (col 8: lines 13-15)

Generating estimation result data representing a result of the estimation of a cost of the component based on the retrieved costs; and (col 6: lines 15-18, 30-35, 56-63)

Sending the estimation result data to the working bodies who have requested the estimation via said network. (Fig 1, col 17: lines 29-35)

Referring to claim 32:

Foley discloses:

The component cost estimation system according to claim 26, wherein said computer:

Obtains material management cost based on the retrieved cost associated with the designated material; (Fig 1)

Obtains general management/sales costs based on the retrieved costs associated with the designated manufacturing steps; (Fig 1) and

Uses the obtained material management cost and the obtained general management/sales costs as costs retrieved from the cost information. (Fig 1)

Allowable Subject Matter

6. Claims 1-6, 9-13, 17-18, 20-21 and 33 are allowed over the prior of record.

7. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art of record is U.S. Pat No. 5,249,120 to Foley and U.S. Pat No. 5,189,606 to Burns et al.

Foley discloses a manufacturing cost estimating method of estimating the cost of manufacturing a material from an initial state to a final state. Foley disclose the cost estimation method takes into account various labor costs, overhead costs, and costs of various steps of operations between the different materials in the initial state and the product in the final state.

Burns et al disclose a cost estimation system for construction that takes into account of cost of material and labor in different region areas.

As per claims 1, 10, 17, 18, 20 and 21, the closest prior art of record taken either individually or in combination with other prior art of record fails to teach or suggest that when implementing the cost estimation method, retrieve the costs associated with a predetermined standard manufacturing steps which are used when the user only specifies a portion of the manufacturing steps.

Conclusion

8. Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rob Wu whose telephone number is (571)272-3136.

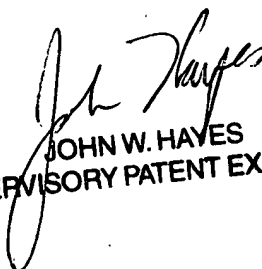
The examiner can normally be reached on Mon-Fri 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571)272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

rw


JOHN W. HAYES
SUPERVISORY PATENT EXAMINER